



## PATENT ABSTRACTS OF JAPAN

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(21) Application number: **07035568**(71) Applicant: **YAMAHA MOTOR CO LTD**(22) Date of filing: **23.02.95**(72) Inventor: **SHIMAMOTO MAKOTO**(54) **LUBRICATING DEVICE FOR ENGINE**

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(57) Abstract:

**PURPOSE:** To decrease the projecting amount from an engine case, so as to improve the degree of freedom in layout, and also to miniaturize the whole engine by arranging an oil cooler and an oil element in parallel with the wall surface of the engine case by deviating them in the height direction.

**CONSTITUTION:** In a valve engine for a motorcycle, lubricating oil from an oil pump 50 is supplied to respective parts through an oil cooler 51 and an oil element 52. In this case, a main gallery 53 for supplying lubricating oil to a crankshaft 11 is arranged under the crankshaft 11, and a first oil passage 54 from the oil pump 50 to the oil cooler 51 is arranged by being deviated in the vertical direction in relation to the main gallery 53. A second oil passage for communicating the oil cooler 51 with the oil element 52 is integrally formed inside the wall of an engine case 7, and a third oil passage 56 for communicating the element 52 with the main gallery 53 is taken as an oil passage to a main shaft 40 with an extended passage 57.

